Castlemaine Naturalist

July 2023

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Monthly newsletter of the
Castlemaine Field Naturalists Club Inc.

"Ecological Decomposers".
Artwork by Louise Saunders

June Monthly Meeting – Guest Speaker, Louise Saunders

"Botanical Art – increasing environmental awareness"

Louise Saunders is a professional botanical and wildlife artist who was born and grew up in Benalla in Victoria's North East. Her mother was an enthusiastic gardener and naturalist. Louise developed similar interests and delighted in all the wildflowers that grew on her grandparent's property, particularly the many ground orchids in the area which she fell in love with, including the rare purple donkey orchids. Louise's family were keen on a variety of arts and crafts including pottery and she also developed many interests in creative arts. This early passion for nature, particularly wildlife and plants, continued to develop and she became a keen painter. Her pictures were noticed and admired regionally and nationally and, with advice and encouragement of the well-known botanists, Mark Clements and David Lloyd Jones, she accepted a challenge to paint all the orchids of NE Victoria. This resulted in 88 (out of a possible 120) exquisite portraits of some of the region's unique and beautiful ground orchids, each painted in a background of vegetation typical of their habitat.

Louise went on to have many exhibitions of her work, starting with one in the Benalla Regional Art Gallery. She progressed on to a career as a professional botanical artist, expanding her portfolio to include subtropical native plants and native animals after relocating to SE Queensland. She enjoys painting her flora or fauna subjects in their natural habitat. She has continued to expand her artistic range to include portraits of pets and exotic animals.

Louise has travelled internationally to pursue her art through residencies and expeditions, including as an illustrator on two Earth Watch expeditions and travelled to Thailand and Borneo and has had her work published in books and magazines.

She enjoys the challenge of working with a number of media including watercolour, fine art pencils, acrylic and pastels. She was subsequently appointed as artist-in-residence at an eco-tourist resort on the Gold Coast, where further exhibitions of her works resulted in sales of her works nationally and internationally, some to well-known clients including the actor Jack Thompson and Lady Susan Renouf.

Louise also became a dedicated wildlife conservationist and rescuer, particularly involving bat rescues during the Hendra and Australian Bat Lyssavirus outbreaks. She fostered many orphaned baby bats, becoming very attached to them.

She regularly donates a percentage from sales of her paintings to wildlife and conservation causes and has donated one of her paintings to support the protests against the commercial development of the Toondah Harbour, on Redlands Coast Qld, an important koala and migratory shorebird habitat.

She was awarded a medal of the Order of Australia in 2019 for her services to wildlife conservation and visual arts. She is a member of several art societies including Queensland Wildlife Artists' Society, Botanical Art Society Australia and Artists for Conservation.

At our June meeting, Louise gave a presentation about her art and conservation work, illustrated with many examples of her beautiful artwork.

Further information can be located on Louise's website.

Judith Nimmo

Samples of Louise Saunders' artwork

On the forest edge (*Antechinus sp.)*

Australian Wildflowers

Excursion to McCay Reservoir, 10 June 2023

Catherine Harboe-Ree

Twenty-six hardy souls braved the chilly weather for the opportunity to visit McCay Reservoir, which is not generally open to the public. Amongst our number were several visitors, and members attending their first excursion. Our leader was the energetic Kylie McLennan, Coliban Water's Reservoir, Rural and Catchment Coordinator.

McCay Reservoir, looking down towards the dam wall and control tower. *Photo: Noel Young*

Constructed from May 1959 to November 1960, McCay Reservoir is a holding and retention basin for the supply of water sourced from the Coliban River storages to Castlemaine, Maldon, Harcourt, Newstead, Fryerstown and Guildford. The reservoir, which has a capacity of 1,360 million litres, sits in a very small catchment of 180 hectares comprising predominantly heathy dry forest. The reservoir was originally called Castlemaine Reservoir, but was renamed in honour of H.W. McCay, a deputy commissioner of the State Rivers and Water Supply Commission.

Kylie showing maps of the reservoir. *Photo: Lou Citroën*

The highlight of the excursion was the old Poverty Gully Tunnel, constructed in the 19th century and still an essential part of the water supply for this district. The tunnel is 756 metres long, about 1.2 metres wide and 1.5 metres high. It supplies water from the Coliban Main Channel to McCay Reservoir. Another highlight was watching Kylie doing push-ups from time to time as part of a charity drive to raise funds for mental health (Push for Better Foundation)!

Participants in the excursion standing beside the tunnel and channel. *Photo: Liz Albert*

Poverty Gully Tunnel. *Photo Lou Citroën*

No doubt due to the time of year, there were not many birds or invertebrates, but we did see several colonies of whirligig beetles in the channel adjacent to the tunnel entrance and a good number of fungi species. At the end of our tour, Kylie took us up a ridge to show us a particularly rich area of grassy woodland, with Red-anther Wallaby Grass and many native herbs and shrubs.

Why is *Discaria pubescens*, the Hairy Anchor-plant, so rare?

David Cheal

Discaria pubescens, the Hairy Anchor-plant or Australian Anchor-plant, is a notable local rarity. It is listed as 'Critically Endangered' under the Victorian legislation (the Flora & Fauna Guarantee Act 1988, the FFG) and is considered 'Near Threatened' in Queensland and 'Endangered' in Tasmania. The text in the Flora of Victoria online mentions it as *"Now extremely rare west of Melbourne (Ballarat district only) and possibly extinct in the north-east (formerly known from Mansfield, Wodonga and Mitta Mitta areas), scattered and uncommon in the east (Snowy Range, Benambra district, Wulgulmerang, Cobberas area, Bendock), usually associated with basaltic substrate near streams, in cool, elevated areas".* Despite all this, it has a few records from our local area, mostly near the Campaspe River (which passes thru basalt country from Kyneton towards Lake Eppalock).

1. Hairy Anchor-plant *Discaria pubescens. Photo: David Cheal*

D. pubescens is a bit of weirdo. It's in the family Rhamnaceae that includes all the *Pomaderris* species but looks so very different, being a mass of rather pungent (vicious even) spines & substantially leafless. The Action Statement No. 47 (under the FFG) refers to its occurrence 'in steam and river valleys in western Victoria', although it also mentions that a few occurrences are 'some distance from drainage lines and streams'.

I became familiar with it during targeted surveys throughout the Victorian Alps and noted that it was always heavily browsed (see photo **1**, from MacFarlanes Flat in the far east of the Alpine National Park, above Suggan Buggan). Nevertheless, it was not notably associated with streams in the Alps. For many observers, its remnant occurrences along streams suggested that it required the extended soil moisture in such situations and this was its prime habitat. However, there is more to streamside habitats than purely extra soil moisture. Its precise habitat in lowland sites is not just beside streams, but amongst the basalt boulders and rocks that often characterize streams thru basalt country. A useful experiment suggested itself, utilizing the basalt scarps and outcrops of my property at Redesdale.

2. Mature *Discaria pubescens*

Photo: David Cheal

Tubestock of *D. pubescens* was obtained and planted amongst the outcropping basalt rocks high on an escarpment (nowhere near a

stream, which is 30m alt. below). Most soon disappeared, but in the meantime an exclusion fence was erected over the outcropping scarp and the remaining *D. pubescens* plants were protected with 90 cm wire mesh guards. In subsequent years these few *D. pubescens* grew very well and the largest is now 1.5m tall and has bloomed (photo **2)**. There are no wallabies, rabbits, hares nor wombats inside the exclusion fence. Regrettably, a wallaby (Black Wallaby, *Wallabia bicolor*) got inside when the gate was left open recently and the next day all the *Discaria* had been nibbled. Further recent plantings of *Discaria* seem to be establishing well.

Discaria pubescens – showing detail of the spines. *Photo: David Cheal*

The conclusion from this account is that the greatest threat to *D. pubescens* is its (unexpected) high palatability. Reducing or removing browsing mammals should be the highest priority for all extant stands and newly-established stands. Its restriction to riparian sites in our region is likely not due to any moisture requirement, so much as resulting from the browsing protection that growing amongst rocks can offer. In particular and in our region, Black Wallabies (*W. bicolor*) are the major threat and rabbits are suspected to be a notable threat too. In the Alps, horses and deer are suspected to be the major threats.

Observations

Pterostylis striata (Striated Greenhood) – Russell Stanley

Russell came across some nice clusters of *Pterostylis striata* at Maldon a couple of days ago. He mentions it only because it is a species absent from Ern Perkins' Castlemaine Orchids webpage. It was growing close to the dam on Smiths Reef Track.

Pterostylis striata, the Striated Greenhood. *Photos: Russell Stanley*

Australian Shield Shrimps – Peter Turner

While on a recent trip to Simpson Desert we sighted these small orange crustaceans moving in muddy water - Shield Shrimps, *Triops australiensis.* In his recent book on Australian deserts Steve Morton summarises the lifecycle of these 'living fossils:

The gibber plain has been baking dry for a couple of years when storms finally gather and dump 40 mm across glistening stones and scattered saltbush. Water gathers in … clay pans, a few cm deep. Within a couple of days, the cloudy red water is churning with shield shrimps gathered in squirming masses to feed on algae and organic matter.

Triops australiensis, Shield Shrimp. *Photos: Peter Turner*

Most earlier references specify two species of shield shrimp (also called tadpole shrimp) in Australia, *T. australiensis* and *Lepidurus apus.* Atlas of Living Australia distribution maps show *Triops* occurs primarily in the dry inland and *Lepidurus* in more southerly regions: Euan Moore has photos of *Lepiduris apis* from wetlands in SW Victoria. *Triops* have two compound eyes and a third simple eye that emerges during early stages of the animal's development. The large shield-shaped carapace covers the head and thorax with many legs (see photos). Reproduction is both sexual and by self-fertilisation of females. Eggs are laid near the edges of the water body and can remain dormant for many years if there is no rain. The fossil record reveals that the species has hardly changed for 250 million years….*And here they are still, hatching from desiccation-resistant eggs the instant the dust is flooded, completing their life cycle in just a few weeks of furious activity* [Morton, p204].

Ref: Steve Morton (2022) Australian Deserts – Ecology and Landscape. CSIRO Publishing

In addition the group visited the Mac Clark Conservation Reserve SE of Alice Springs. This healthy woodland reserve is one of three areas in Australia where the unusual *Acacia peuce* tree is found.

https://en.wikipedia.org/wiki/Acacia peuce

Acacia peuce tree showing white seed pods. *Photo: Peter Turner*

"It was a beaut lookin' fella, that fancy rosella"- Kerrie Jennings

Both grandchildren eyed the pot plant and Grannie's new ceramic bird. Hugh (4yo) said it's a 'Rosella', Evie (6yo) said no, it's a 'Parrot'. With a full-blown barney erupting over the ID of Grannie's new bird, an exasperated Hugh left the room shortly to return with his version of a field guide, ('There was an old lady who swallowed a mozzie'), triumphantly slapped it open on the table, "Seeee, Evie! It's a Ro-sel-laaa!! Granny had to get out Pizzey & Knight to explain …

Left:

Hugh's reference manual!

Duelling Raptors – Ash Vigus

Keen local birder and photographer, Ash Vigus. sent these great photos of a Peregrine Falcon fending off a Brown Falcon trying to grasp the Peregrine's kill. They were seen near Muckleford Station. The Peregrine only had one eye but won the duel.

No you don't!

The Brown Falcon concedes.

Photo: Ash Vigus

The Victor – Peregrine Falcon

Photo: Ash Vigus

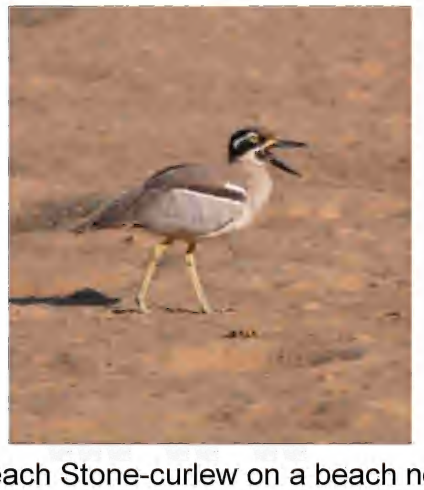
More Observations

Starfish fungus *Aseroe rubra*
Photo: Sue Oldfield

Chelepteryx collesi Batwing Moth, Bega.
Wingspan approx. 150mm.
Photo: Euan Moore

Rosy Heath-myrtle, *Euromyrtus ramosissima.* Sighted along the Loop Tk.
Photo: Peter Turner.

Pterostylis melagramma
Sue Teltscher spotted this Tall Greenhood on the edge of the Goldfields Tk.
Photo: Peter Turner



Beach Stone-curlew on a beach near the mouth of Boggy Ck, Merimbula. Well south of its normal range.
Photo: Euan Moore

Birds of Sutton Grange – June 2023

Nigel Harland

Australian Magpie	Grey Currawong	Silvereye
Australian Raven	Grey Shrikethrush	Sulphur-crested Cockatoo
Superb Fairywren	Laughing Kookaburra	Black-faced Cuckooshrike
Crimson Rosella	Long-billed Corella	White-browed Scrubwren
Eurasian Blackbird	Pied Currawong	Yellow-tufted Honeyeater
Galah	Red Wattlebird	

From the Committee

Our club has a keen interest in the local environment and wants to help ensure that our local native flora and fauna is protected from threats to its long-term survival. From time-to-time there are opportunities for the club to comment and make submissions to all levels of government on issues as part of enquiries and community consultation procedures.

We have recently added a new "Submissions" page to our website under the "About us" tab where you can see our recent submissions as below.

April 2023:

Submission to Mt Alexander Shire Council on the Council's 2023-24 Draft Budget asking for more funding for weed control.

Submission to Mt Alexander Shire Council on the draft Mount Alexander Shire Council Climate Change Strategy. Also posted is the response to our submission from Council.

May 2023:

Submission to the Victorian Parliament Inquiry into Victoria's Recreational Native Bird Hunting Arrangements.

SEANA Spring Camp - Yarram, October 20-23, 2023, hosted by the Sale & District FNC and Latrobe Valley FNC

The South East Australian Naturalists' Association (SEANA) organises two camps each year where Field Naturalist groups from around SE Australia gather to meet fellow naturalists and explore a new region under the guidance of local experts. Several of our members greatly enjoyed the Autumn camp at Port Campbell. The SEANA Spring Camp will be held in Yarram where local FNC hosts look forward to giving you an appreciation of the highly diverse region which includes the Tarra Bulga National Park, a number of state forests with rich flora, Nooramunga Marine and Coastal Park, Corner Inlet and the northern end of Wilsons Promontory National Park.

Please click on the following links for the second circular with an overview of the camp activities, accommodation options and the registration form (due Friday 4th August). Early accommodation booking is recommended. Enquiries: camp convenor Phil Rayment philrayment@dcsi.net.au.

Coming Events

Monthly Meeting: Friday 14th July, 7.30pm by Zoom.

Speaker: Dr Matt West (University of Melbourne Biosciences) "Protecting frogs from Chytrid fungus".

See Back Page for details on how to join the Zoom meeting.

Matt will talk about his research studies into the Chytrid fungus that is causing a serious decline in our frog populations. Matt is identifying factors that influence frog disease susceptibility and strategies for protecting frogs from this fungus. He will also describe projects to translocate healthy populations of frogs, including the Growling Grass Frog, to boost populations at other sites where they were once more common.

Excursion: Sat 15th July, 1.30pm. "Maldon Historic Reserve Flora Surveys"

Leaders: Euan Moore and Richard Piesse.

Our July excursion will be to the Gower area of the Maldon Historic Reserve. The purpose of the visit will be to look at some of the vegetation plots established by Ern Perkins around 2009 to monitor the effects of bush fires and fuel reduction burns on the native vegetation. We will remeasure one or possibly two of these quadrats and demonstrate the methodology used. We will also make a quick visit to another set of quadrats that have been subject to intense fire so that we can see the differences in impact between no fire, light fire and intense fire. The bush is starting to show the effects of winter rain and approaching spring. Some plants are already starting to flower and many herbs, including orchids, are starting to shoot. The wetter conditions also mean that there is an abundance of fungi. There will be a chance to explore the area to record and photograph those plants that are already flowering.

Meet: for 1.30pm departure from the Octopus car park (Duke St, opposite the Castle Motel) **or 1:45pm** at Smiths Reef dam.

Bring: water, afternoon tea, sturdy shoes and if necessary, wet weather gear.

Boot hygiene: due to concern about spreading plant pathogens in our soils, please clean your boots thoroughly before leaving home (scrub off dirt and remove seeds).On arrival at the excursion site, we will spray the soles of our boots with Phytoclean. Again, we will brush dirt etc. off our boots before leaving.

The Field Trip will be cancelled in extreme weather conditions.

This quadrat had a patchy burn in 2009. How does it look now? *Photo: Ern Perkins*

Advance Notice - September Excursions:

Special double field trip near Ballarat, Saturday 9th - Sunday 10th September

Following our usual Monthly Meeting on Friday 8th September in the Uniting Church Hall, for our September excursion we will visit two sites near Ballarat on the Saturday and Sunday.

- **Saturday 9th** - meet at 3pm at a private fenced wildlife sanctuary at Berringa (40mins SW Ballarat) for a tour of the sanctuary, then an early picnic tea before viewing grazing free-roaming nocturnal animals (Rufous Bettongs, Bandicoots etc) until about 8pm.

- **Sunday 10th** – meet at 9.30am for an orchid/bird walk in Clarkesdale Bird Sanctuary (360 Linton-Piggoreet Rd, near Linton) with Emily Noble, Secretary Ballarat FNC. As we search for beautiful native orchids we will enjoy the wonderful array of springtime birdlife at the sanctuary.

Because we need to know the number attending prior to this event we ask that participants please register by letting us know on castlemainefnc@hotmail.com if they are planning to attend these activities. Please provide your name, number attending, contact phone, where you will be staying and indicate whether you will be attending on both days, Saturday only or Sunday only. We will send details of meeting places and additional information directly to those who have registered.

Accommodation Saturday 9th September - Participants must make their own accommodation bookings for Saturday night. Attendees can either camp (suitable for caravans) at the Clarkesdale Bird Sanctuary (bookings required as below) or stay in nearby accommodation.

- **Camping at Clarkesdale Bird Sanctuary** (about 20mins drive from Berringa) – Amenities: toilets and shower, unpowered sites but power points available for charging phones etc., drinking water and hot water. Please book directly with the sanctuary coordinator emily.noble@birdlife.org.au $15 per adult + $5 per night. Payment via EFT: Account Name: BirdLife Australia Operations Account, BSB: 083166 A/c No.: 11 863 6581, Ref: Clarkesdale + your name. Enquiries: Emily 0433 344 287.

- **Alternative accommodation suggestions:** There are country hotels offering accommodation at Linton, Smythesdale and Snake Valley. Alternatively there are a number of motels and hotels in the south-western suburbs of Ballarat. Most of these options will be within 45mins travel from our two activity sites.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club.

Castlemaine Field Naturalists Club
PROGRAM

Monthly meetings are being held on-line via Zoom during the winter months (June - August) commencing at 7.30pm. If you registered for the June meeting, you will be sent the link for registering with Zoom for the July meeting. Otherwise, please email Peter Turner at munrodsl@iinet.net.au to register and receive the link for joining the Zoom meeting.

Members and visitors are invited to share their interesting observations at the meeting. Please email any photos to illustrate your report as JPEG file(s) to Euan Moore (calamanthus5@bigpond.com) by noon on the day of the meeting.

Excursions (Saturday following the general meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise.

See 'Coming Events' page for more details about July events.

Fri July 14, Meeting 7.30pm (by Zoom). Speaker: Dr Matt West (University of Melbourne, Biosciences) "Protecting frogs from Chytrid fungus".

Sat July 15, Excursion 1.30pm. Leaders: Euan Moore & Richard Piesse, "Gower area, Maldon Historic Reserve flora surveys".

Fri August 11, Meeting 7.30pm (by Zoom). Speakers: Tracy Lyten & Fiona Jackson (Skylos Ecology) "The role of detection dogs in conservation".

Sat August 12, Excursion 12 noon at the Octopus or 1.30pm at Shadbolts Picnic ground, Whipstick. Leaders: Peter Turner & Noel Young, "Whipstick wildflower walk".

Fri September 8, Meeting 7.30pm (Uniting Church Hall). Combined meeting with Birdlife Castlemaine. Speaker: Jane Rusden "Birding in SA Desert country".

VISITORS ARE WELCOME AT CLUB ACTIVITIES

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com

* Deadline for the August edition**: 28th July**

Club website (Webmaster:Ron Wescott) – www.castlemainefieldnaturalists.org.au

Subscriptions (Membership forms and payment details on CFNC website)

Ordinary membership: Single $35, Family $50

Pensioner or student: Single $25, Family $30

Subscription includes the monthly newsletter, Castlemaine Naturalist.

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